

THE
NEW JERSEY MEDICAL REPORTER.

VOL. VIII. SEPTEMBER, 1855.

No. 9.

ART. I.—*History of the American Medical Association.*
By ONE OF ITS MEMBERS.

At the close of the great Anniversary Meeting of the Association in New York, May 6th, 1853, a deep feeling of sadness was communicated to the whole profession, by the sudden death of seven members at Norwalk, Connecticut, on their way home from the meeting. The railroad train in which they were proceeding homeward, ran off an open drawbridge, at Norwalk, plunging with all its freight of human lives into deep water, where a large number of passengers immediately perished. Among the latter, were Abel L. Pierson, M. D., of Salem, Massachusetts; Archibald Welsh, M. D., of Hartford, Connecticut; Josiah Bartlett, M. D., of Stratham, New Hampshire; Samuel Beach, M. D., of Bridgeport, Connecticut; James M. Smith, M. D., and James H. Gray, M. D., of Springfield, Massachusetts; and Wm. C. Dwight, M. D., of Moscow, New York, all of whom were esteemed members of the Association. Soon after the facts in relation to this sad catastrophe were known, such members of the Association as yet remained in the city of New York, assembled and passed resolutions of respect for the dead, and appointed a committee, consisting of Drs. Joseph M. Smith, F. Campbell Stewart, J. W. G. Clements, Wm. Rockwell, Isaac E. Taylor, Edward L. Beadle, and John Watson, "to devise some suitable method of commemorating the event, and the worth and professional character" of those who had been thus suddenly cut off; and to report the same to the next annual meeting of the Association. At the succeed-

ing annual meeting of the Association, this committee recommended that a narrative of the event, together with a brief biographical sketch of each individual, should be prepared and published in the *Transactions*. This recommendation was approved by the Association, and the Biographical Sketches were prepared, and may be found in the VII. volume of the *published Transactions*.

The long pending propositions for amending the Constitution of the Association, having been disposed of at the annual meeting in New York, there was no subject particularly affecting the national organization, which was discussed during the year.

The annual address of the President, Dr. Wellford, had again called the attention of the profession very strongly to the defective character of the preliminary education of those who engage in the study of medicine, and had induced some state and local societies to take action in reference to it. At the meeting of the Medical Society of Virginia, held in April, 1854, the following resolution was discussed and unanimously adopted, viz:—

“*Resolved*, That the members of the Society now present, do hereby pledge themselves to each other, that they will not receive under their instruction, as students of medicine, any individual who is grossly deficient in either mental or moral endowments, or in that preliminary education which is necessary to fit him for entering a profession requiring high intellectual and moral qualifications; and that we respectfully and earnestly recommend to our brethren throughout the State to adopt a similar rule of action.”

As the next annual meeting of the Association was to be held in St. Louis, Missouri, the profession throughout the Western and Northwestern States was prompted to increase and extend its social organizations, and thereby to advance in an equal ratio all its educational interests.

The delegates and members of the Association attending the Seventh Anniversary Meeting at St. Louis, assembled in Verandah Hall, at 11 o'clock A. M., and were called to order by the senior Vice-President, Dr. Usher Parsons, of Rhode Island; the President, Dr. Jonathan Knight, of Connecticut, being absent. The local Secretary, Dr. E. S. Lemoine, of St. Louis, read letters

from Dr. Knight, the President, and Dr. Edward L. Beadle, the senior Secretary, explaining their absence and expressing their continued and deep interest in the prosperity of the Association. Dr. J. R. Washington, of St. Louis, chairman of the Committee of Arrangements, in behalf of the profession of the city of St. Louis, and the State of Missouri, very cordially welcomed the delegates and members of the Association; and read the list of those in attendance so far as they had been registered.

The Vice-President, Dr. Parsons, responded to the remarks of Dr. Washington, in behalf of the Association, and announced that the meeting was duly organized for the transaction of business. The remainder of the morning session was occupied in the appointment of a Nominating Committee, consisting of one from each State represented; the hearing of the report of the Treasurer and Committee of Publication; and the reception of invitations to hold the next annual meeting in Philadelphia, and Detroit. During the afternoon session, communications were received from Dr. J. G. Adams, of New York, in relation to a presentation of the *Transactions* of the Association to the Imperial Academy of Medicine at Paris; from the New Hampshire Medical Society, in relation to the propriety of admitting delegates to the Association from societies which number among its members persons who adopt and practise some one of the forms of empiricism; and from Dr. McIlvaine, of Ohio, in reference to the organization of the American Medical Society of Paris, and accompanied by a memorial in reference to the system of Medical Education in the United States. On motion of Dr. S. D. Gross, of Ky., the following resolution was adopted by an almost unanimous vote, viz:—

“*Resolved*, That it be recommended to all future Committees of Arrangement of this Association, that they dispense with costly and extravagant entertainments.”

Dr. Gross also proposed the following amendment to the Constitution, which was laid on the table until the next annual meeting of the Association, according to the rule governing constitutional amendments.

“*Whereas*, It is of great importance to the harmony and good feeling of this Association, that its presiding officer should be fully acquainted with parliamentary usages, and the mode of presiding over deliberative assemblies, therefore,

"*Resolved*, That that part of the Constitution which relates to the election of officers be so amended as that the election shall take place immediately before the adjournment of each meeting, instead of immediately after its commencement."

Dr. J. P. White, of Buffalo, chairman of the Committee on Nominations, reported the following, viz :—

For President.

CHARLES A. POPE, of Missouri.

Vice-Presidents.

E. D. FENNER, of Louisiana; N. S. DAVIS, of Illinois;
WILLIAM WRAGG, of South Carolina; JOHN GREEN, of Mass.

Secretaries.

E. S. LEMOINE, of St. Louis, Mo.; FRANCIS WEST, of Phila., Pa.

Treasurer.

D. FRANCIS CONDIE, of Philadelphia, Pa.

The report of the Committee was accepted, and the officers proposed unanimously elected. The city of Philadelphia was also selected as the place for holding the next annual meeting of the Association. At a former annual meeting, a committee had been appointed to procure a stone with a suitable inscription for the monument to the memory of Washington. Dr. John L. Atlee, of Pa., chairman of this Committee, reported "that he had adopted, at the suggestion of the lamented Dr. Pierson, of Salem, the design for the stone, representing Hippocrates refusing the presents of the ambassadors of King Artaxerxes, who invited him to go to Persia and succor the enemies of Greece. The sculpture, which is upon Vermont marble, was wrought by Mr. Samuel Beck, a young artist of Lancaster Co., Pennsylvania." Dr. Atlee presented to the Association daguerreotype copies of both the picture and the sculpture, and solicited further contributions from members; about four hundred dollars more being required to complete the work. On the morning of the second day, the reports of committees being in order, the following were received, and referred to the Committee on Publication, only abstracts of the same being read to the Association.

On Epidemic Erysipelas. By R. S. Holmes, M. D., of St. Louis.

On The Epidemics of South Carolina, Florida, Georgia, and Alabama. By D. J. Cain, M. D., of Charleston, S. C.

On The Epidemics of Tennessee and Kentucky. By W. L. Sutton, M. D., of Georgetown, Ky.

On The Epidemics of Ohio, Indiana, and Michigan. By George Mendenhall, M. D., of Cincinnati.

On The History of the Yellow Fever in New Orleans, in the summer of 1853, and on Cholera. By E. D. Fenner, M. D., of New Orleans.

On Medical Education. By J. L. Cabell, M. D., of Virginia.

Dr. C. A. Pope, chairman of the Committee on Prize Essays and Volunteer Communications, reported that nine essays had been submitted to the examination of the Committee; but they had awarded only one prize. The essay thus honored, was entitled *An Essay on a New Method of Treating Ununited Fractures, and Certain Deformities of the Osseous System*, and its author was Daniel Brainard, M. D., of Chicago, Illinois.

The Committee on Nominations reported the names of thirty-seven committees, on a great variety of subjects, to report at the next annual meeting of the Association; and also the usual standing Committees on Medical Literature, Medical Education, Prize Essays, Arrangements, and Publication. The report was accepted, and unanimously adopted, except that part of it which related to the appointment of a Committee on Publication. Since the first organization of the Association, the majority of the Committee on Publication had been located in Philadelphia, and the printing of the *Transactions* had been done in that city.

But the Nominating Committee had, in their report, recommended the selection of a chairman with the majority of the members of that Committee, from members of the Association residing in New York. This recommendation was strenuously objected to, on the singular pretence that the change of location would be an implied censure on the former Committee on Publication; and it consequently led to a protracted and warm discussion, during which the action of the Nominating Committee, together with the principle that *all* the committees of the Association are subject to the utmost freedom of change annually, was sustained by Drs. Sayre, of New York; Eve, of Georgia; Breckenridge, of Kentucky; Davis, of Illinois, and others; and opposed

by Drs. Storer, of Boston; Reyburn, of Missouri; and Atlee, of Pennsylvania.

After various efforts to amend, the original report, recommending a majority of the Committee on Publication to be selected from New York, was adopted by a large majority.

The following resolution was then unanimously adopted:—

"Resolved, That a vote of thanks be returned to the late Publication Committee, for their best endeavors to serve the American Medical Association."

The resignation of Dr. D. F. Condie, of Philadelphia, as Treasurer of the Association was presented, and Dr. Isaac Wood, of New York, was appointed in his place.

Among the many resolutions proposed, discussed, and acted upon during the several daily meetings of the Association, were the following, viz:—

"Resolved, That, hereafter, the majority of the Committee on Publication shall be selected from the physicians of that city in which this Association may hold its annual session."

This was offered by Dr. Breckenridge, of Ky., and adopted.

"Resolved, That, hereafter, every paper received by this Association, and ordered to be published, and all plates or other means of illustration, shall be considered the exclusive property of the Association, and shall be published and sold for the exclusive benefit of the Association."

"Resolved, That this Association earnestly recommend to their medical brethren, in those States in which societies do not exist, the immediate organization of State and county medical societies."

"Resolved, That a committee of one be appointed by the Chair, to inquire into the causes which obstruct the formation and establishment of our national medical literature, and to report on the subject at the next annual meeting of this Association, or as soon thereafter as practicable."

The Chair appointed Dr. S. D. Gross, of Ky., said committee.

"Resolved, That a committee of three be appointed by the Chair, to report, at the next meeting of the Association, the best

means of preventing the introduction of disease, by emigrants, into our country."

The Committee appointed, consists of Drs. S. H. Dickson, of Charleston; J. H. Griscom, of New York; and E. D. Fenner, of New Orleans.

The annual meeting at St. Louis, though not attended by as large a number of delegates as the one that preceded it in New York, was nevertheless well attended, and productive of much pleasure and profit. The local profession of St. Louis, spared nothing to render the stay of the members of the Association as pleasant as possible. Besides providing a most elegant and sumptuous general entertainment on the evening of the third day of the session, the most pleasant social interviews were held at the private residences of several of the most distinguished physicians each evening, and also at the residences of ex-Mayor Kennett and Col. O'Fallen. Invitations were extended to visit all the public institutions, colleges, &c., and to make a free excursion on the Pacific Railroad. The latter invitation was accepted by a part of the members, with their ladies, whose enjoyment on the occasion will not soon be forgotten. The annual meeting was closed after adopting the usual complimentary resolutions, on the evening of the third day of the session. And here we must close, for the present, our history of an institution, which, in its origin, objects, and general career, has no parallel in Christendom. But we should not feel satisfied with our task, without adding a few pages by way of comment on the facts of the past, and the prospects of the future.

ART. II.—*An Essay on Animal and Vegetable Life.*

By JOHN B. PHILLIPS, M. D.

(CONTINUED FROM PAGE 403.)

HAVING said thus much of the germ and its peculiar properties, I pass to the consideration of the effect of temperature.

The importance of heat in the production and maintenance of all forms of life is obvious to all. Heat, it has been said, is life

itself, and there can be no doubt of its being an ever-present and indispensable condition. From before the time of Pythagoras to the present day, philosophers have been divided in their opinions as to the nature of the vital principle. One class maintain that every particle of matter is possessed of vitality, and is complete in itself. And this will not appear so absurd if we consider the innumerable transformations and metamorphoses that are continually being effected in the inorganic world. Take crystallization for an example.

The other doctrine, being that which was promulgated by Pythagoras, teaches that matter is *inert* in itself, and can only be excited to action by some extraneous force.

Now if we accept the latter doctrine as the true one, we have already a force of forces adequate to the production of all vital phenomena in the primary germ. But this force is not always active; it may remain, as it does in some instances, for thousands of years in a static condition. Seeds have been taken from the Egyptian tombs, which, when planted, flourish and grow, though 3000, perhaps 4000 years have elapsed since they were first entombed. Germ force will not act without a definite amount of heat.

Heat, then, is the *great excitor* of all vital actions. It must be of a certain definite quantity, in warm blooded animals, from 98° to 100° .

The sun is the great, unfailing source, not only of light, but, with certain limitations, of life also.

At the north and south pole, external winter, and external death reign; in the tropical and temperate zones, earth, sky, and ocean all teem with vegetable and animal life.

Heat is so intimately associated with light that they are always found together, and it is with some difficulty that they are disconnected. In many of their properties they are analogous; they are reflected, transmitted, and polarized in precisely the same manner. Nevertheless, they may be separated, as the simple experiment of holding a glass before the fire will show, the heat for a time being arrested, while the light is transmitted.

Modern science has proved that the sun's rays are divisible into three distinct kinds, one producing light, another heat, and a third, chemical action, in other words, calorific and chemical.

In the year 1672, Sir Isaac Newton first promulgated the doctrine of the compound character of the sun's rays. In as few words as possible, allow me to describe his celebrated experiment.

Every one is aware that, from making an aperture in a window shutter of a dark room, and permitting strong light from the sun to enter, a luminous circle will be made on the opposite wall. This luminous circle is called the spectrum, or sun's shadow, and is of a uniform white color. Now, by placing a triangular, transparent prism a little behind this aperture, so that the rays of the sun must pass through it, a remarkable change must be effected, both in the shape and in the color of the shadow or spectrum on the wall. It is no longer circular, but elongated, like the shadow of a cylindrical body.

But what is still more remarkable, instead of the uniform white, it now exhibits all the colors of the rainbow, the lower of which is red, then orange, yellow, green, blue, indigo, and violet.

By causing the colors separated by one prism, to pass through a second of the same power, in an inverted position, the seven colors disappear, and the white spot returns.

Hence, Sir Isaac Newton inferred that the solar ray was composed of seven primary colors. Sir William Herschel has since discovered another, above the violet; but Dr. Brewster has shown that the seven colors of the spectrum are reducible to three, namely, red, yellow, and blue.

By placing the bulb of a thermometer in the different colored spaces, Sir William Herschel discovered that there was an essential difference in the amount of heat present, it being greatest in the red space, and decreasing gradually to the violet, which was its minimum point. Subsequent experiments convinced him that the point of maximum heat was beyond the red space, and in this view he was supported by Sir H. Davy. This point was contested for some time, some asserting that it was in the red space, some that it was beyond it, and others that it was in the yellow. The matter was finally set at rest by the experiments of Malloni, who, using a prism of rock-salt, succeeded in obtaining the point of maximum heat, so far beyond the red space as to leave no longer any room for doubt.

The result of all these experiments, was the establishment of the fact, that the solar rays are composed partly of calorific or heat rays, which are distinct and separate from the rays of light proper. *Secondly*, that these rays are of different degrees of refrangibility.

By using a prism of rock-salt, the point of maximum heat is far beyond the red space; using successively media of different powers, it approaches first nearer, then to the red space, then to the yellow, then to the violet side of the yellow, and finally, by causing the rays to pass through water, and then through glass colored with the oxide of copper, the calorific rays are completely absorbed, so that no effect is produced on the most delicate thermometer. Thus the independent character of the calorific or heat rays is successfully established.

The chemical power of solar light is well known. Plants that grow in the dark, are of a pale and sickly hue. By a course of experiments similar to those just described, Dr. Wollaston established the fact that there is a distinct chemical ray, differing equally from the rays of light and heat. Instead of the point of greatest chemical power being in or below the red space, as in the case of the calorific ray, it follows an entirely different law, being situated directly at the opposite end of the spectrum, a little beyond the violet space, and decreases gradually in power down to the green, where it disappears.

Now we know that in the vegetable world all the changes of the crude plasma into proto-plasma, or the proximate elements of the food of plants, is effected by means of chemical action. Hence it follows, as an absolute necessity, that where the greatest amount of chemical rays are concentrated, there will the plant flourish the best; and astonishing as it may seem, though it is strictly in accordance with what should logically happen, this is found to be precisely the case.

In the red space of the spectrum there are no chemical rays.

A seed exposed in that situation, under favorable circumstances, will not germinate. In the yellow light there is a feeble attempt at germination, but the plant soon perishes. In the green a very feeble plant is produced. In the blue, and above where we have found the greatest amount of chemical power concentrated, the plant flourishes and grows luxuriantly.

To explain the phenomena of light and heat, two theories have been proposed; the corpuscular theory of Sir I. Newton, both from its intrinsic merit and through the influence of his great name, was formerly most generally received; but scientific men, with Sir W. Herschel at their head, now generally reject the theory of Newton.

Another hypothesis was started about the same time as Newton's, by Huygens, also an accomplished scholar and a profound mathematician. His idea was that there is distributed throughout the universe an extremely subtle and elastic fluid, or ether, which not only fills all space, but pervades all bodies, and surrounds each molecule of matter; that in this fluid luminous bodies excite waves, which are propagated with inconceivable rapidity in the same manner that they are produced in the air and on the surface of water. It is of such extreme rarity, as to offer no resistance to the motion of the earth or planets, possessing inertia with gravity.

It is calculated to be 490 millions of times more elastic than our atmosphere, bearing about the same proportion to it in density, as solid granite does to common air.

The inconceivable rapidity of its undulations have been calculated by mathematicians with a proximate degree of certainty, and the astounding result announced, that in a single second 490 millions of millions of vibrations are produced. They tell us that the sensation of color depends upon the number of vibrations in a given time. The number I have just mentioned produces the red ray. The vibrations increase from the red to the violet, which is greatest.

To produce the impression of the violet color upon the retina, it is necessary that 727 millions of millions of vibrations should strike upon it in a single second of time.

This is not romance, but science, and is supported by the high authority of such men as Sir W. Herschel, Dr. Young, Arago, and Airy.

It explains many of the phenomena which the corpuscular theory of Sir I. Newton fails to do. Astronomers have observed that the period of the return of Encke's comet to its perihelion, is materially shortened every time it makes its appearance, furnish-

ing one of the strongest proofs of the existence of a resisting medium in space.

A different character or number of undulations produces heat and another chemical action. In other words, light, heat, and chemical action, are merely different states, or different manifestations of this all-pervading, all-surrounding fluid or ether.

This subject is pregnant with such interest, that I leave it with reluctance, but I must pass on to the last division of my subject—the influence of atmospheric air—in which connection I will speak of animal heat.

The composition of the atmosphere is well known. For common purposes, it will answer to say, that it is composed of four-fifths of nitrogen and one-fifth of oxygen gas, not chemically united, but mechanically mixed together; and floating in it we find a small portion of the vapor of water and carbonic acid gas. Ammonia is also known to be present, though not appreciable by chemical tests. Oxygen is the most widely diffused elementary substance in nature; its range of affinities are far greater than any other. It enters into chemical combination with all the gases, metals, and earths. Uniting with hydrogen, it forms water; with nitrogen, air; and with the metals and earths, it forms the principal part of the solid structure of the earth. Of all known bodies, it is the most active in its affinities, being the great decomposing agent.

Nitrogen, on the other hand, is very feeble in its affinities, forming very few combinations with inorganic matter. It is the most indifferent substance known, and serves to dilute the oxygen which otherwise would, by its activity, destroy all animal and vegetable life.

The portion of carbonic acid in the atmosphere amounts to about $\frac{1}{10000}$ th part of its entire weight. This is so small as not to affect the life or health of animals, to whom, when breathed into the lungs, it is a poison, while at the same time it is amply sufficient for all the purposes of vegetation.

Now, an analysis of oak-wood shows that about one-half of it is composed of carbon. Whence is this carbon derived? It must come either from the earth or from the atmosphere.

It was formerly supposed to be obtained principally from the

soil, but more recent investigation proves to a demonstration that it comes almost exclusively from the air.

This is shown, in the first place, by the fact that all plants flourish in carbonic acid gas, while they dwindle and die in other gases where carbon is not present.

Again; place a growing plant in carbonic acid gas, and after a time we find that the carbonic acid gas has disappeared, and we have oxygen in its place. Here, then, is proof positive that the leaves of growing plants absorb carbonic acid gas and eliminate oxygen; and, consequently, that the great source of the carbon which constitutes one-half of all vegetable structures, is the atmosphere alone. Indeed, how could it be otherwise? The only source of carbon in the soil available to plants, is that furnished by the decay of former vegetation. If this were all we had to depend upon, we would all starve to death before ten years. But how could vegetation ever have had a beginning, on this hypothesis? and admitting it had a beginning, it must necessarily have been very feeble.

Now, the immense carbonaceous vegetable deposits that we find, in the shape of coal mines, show that it was exactly the reverse.

There is every reason to believe that, before the earth was fitted for the habitation of man, the early vegetation was far, far more luxuriant than at present. The carbonic acid in the air being more abundant, nourished vegetation to a gigantic growth, while at the same time the earth was rendered unfit for the habitation of man and the higher animals.

That coal is formed from vegetable matter, is admitted by all; and so important a feature do coal formations present in the stratification of the earth, that geologists consider that period as worthy of being set apart as a distinct epoch in its history; and the carboniferous period is referred away back to the beginning of time. The principal parts of the carboniferous deposits in the earth are found between the *old* and *new sandstone*. No remains of any of the higher animals are to be found in either of these formations, but they abound in a great variety of plants. Hundreds of species are found there that are now entirely extinct. The inference is, that long before the earth was fitted for the abode of the higher animals, there was an age exceedingly favorable to

the growth of vegetables. That plants do not derive their carbon from the earth is, again, proved from the fact that there are some that grow exclusively in water, and entirely disconnected with the earth, rising and sinking at different times in the day.

Others, again, live and flourish in the *atmosphere* alone. These aerial plants are very common in tropical climates, where the air is moist; they cling to the branches of trees, and hang down at great lengths. Longfellow, in his "Evangeline," speaks of these "trailing mosses in mid air," as hanging from the "towering and tenebrous boughs of the cypress," and "waving like banners that hang on the walls of ancient cathedrals."

Water, carbonic acid, and ammonia, are the principal constituents of the food of plants. We have seen that carbonic acid is derived from the atmosphere. Both water and ammonia come from the same source; both float through the air in the form of vapor or gases, and both descend to the earth in the rains and dews.

The ammonia is washed out of the air, as it were, by the watery vapors, and is carried down to the roots of growing plants.

The gardener knows that common well-water is not so efficient in promoting the growth of vegetables as rain-water. The reason of this is, that rain-water contains ammonia, while well-water does not.

Rain-water, then, holding in solution this ammonia and a small portion of the mineral constituents of the soil, is absorbed by the roots of plants; from thence it is carried up to the leaves, through the circulating vessels, and then undergoes aeration. The leaves effect a series of chemical changes; the carbonic acid of the air is decomposed and the carbon assimilated; the water in the sap is decomposed, and a portion of the oxygen thrown out. The sap is thus fitted for the nourishment of the tree, and is returned to it from the leaves, and thus contributes to its development and growth; and this is the whole process.

You see, therefore, that vegetation is chiefly dependent upon the air for its subsistence. Set fire to a haystack, and compare the ashes with the mass that has disappeared, and it will show how much was furnished by the air and how much by the soil.

The earthy portions remain on the earth, while the oxygen, nitrogen, hydrogen, and carbonic acid gases, have returned to the air from whence they came. Vegetation, then, is principally a combination and condensation of the superfluous vapors and gases that were formerly floating about in the air, effected by means of the vital power in the roots and leaves of plants.

Of the uses of atmospheric air in the animal economy, I shall speak of but one, and that is, the production of animal heat.

The heat of man's body is a constant quantity. It is the same in winter and in summer—at the equator and at the poles.

Now, as the animal body does not differ materially from other bodies in its capacity for conducting and radiating heat, it is evident that it must possess some means within itself of regulating its temperature.

This was formerly attributed to the unknown principle of vitality; but it is now satisfactorily shown to be the result of a chemical union of carbon and oxygen in the blood. The vital principle only elaborates an organism; it cannot create matter, either ponderable or imponderable. Heat is generated in the system in the same manner as in a common stove. One-fifth of the air we breathe is composed of oxygen gas, and $\frac{1}{10000}$ th part of carbonic acid. But in the air exhaled from the lungs, we find that the oxygen is displaced, and we have carbonic acid in its stead. But carbonic acid gas is composed of two parts of oxygen and one of carbon. As the oxygen has disappeared from the air that was inhaled, it must have entered into the system; and the carbonic acid exhaled must be *formed* in the system.

The source of the two parts of oxygen of which carbonic acid gas is composed, is already formed in the air; but there is one part of carbon in its composition whose oxygen is yet to be sought.

Whence is this derived?

Animals obtain their food either directly or indirectly from the vegetable world. I have already stated that carbon is the principal element in the composition of vegetables; and a chemical analysis of the different organs and tissues of the animal body, shows that at least one-half of its substance is composed of carbon alone.

In the early part of my essay, I endeavored to impress the

fact, that there is a continual breaking up and disintegration of every part of the human body, and a consequent return of the vital tissues to their dead inorganic elements. Therefore, the amount of carbon set free in the system must be very great.

At the same time, it is necessary that this carbon should be carried out of the system, else it will clog the machinery of life. The water that passes over the mill-wheel must pass away at once; if there be back-water, the large wheel and all its connecting machinery is instantly arrested. How, then, is this carbon carried out of the system?

In the corporeal structure, it is solid. Solids will not travel through the body without injury, except in the alimentary canal, and this the dead carbon of the tissues has no means of reaching. It must pass off, then, either in a fluid or gaseous state. We have seen that the lungs are continually throwing off carbon, in the form of carbonic acid gas; it is calculated that an ordinary man expels between seven hundred and eight hundred pounds of carbon from his lungs every year of his life. Need we look further? Is not the case made clear, that the carbon of the system is carried off in the shape of carbonic acid gas?

The arterial oxygenated blood pouring through all parts of the system, meets in its course with the effete dead carbon of the tissues; having a strong affinity for each other, a chemical combination takes place, and carbonic acid is formed and thrown into the veins; from the veins it is carried to the lungs, and then expelled from the system altogether.

Now, in the chemical union of carbon and oxygen in the blood, we have the source of animal heat.

ART. III.—*A Complicated Case of Labor.*

By R. DOUGLASS, M. D.

EVERY organized being possesses the power of providing for its own conservation, of resisting whatever tends to its own destruction, and of restoring what it has lost. Nature, when not thwarted in her designs, is perfect in all her works; and where

her work sustains the slightest injury, or is afflicted with the gravest malady, you will see a proportionate concurrence of conservative efforts put forth to repair that injury. What could art effect were it not for this medicatrix force of nature? It could produce nothing, but, so far as the profession is concerned, disappointment and entire distrust, followed by total abandonment of the science; and instead of employing, in this connection, the old familiar term "*healing*," they would be forced to exclaim, *helpless art*! But in bringing art to the aid of nature, we must keep a steadfast eye to the *vis medicatrix nature*, and guard, as far as possible, against that *medecina perturbatrix*, which invariably exerts her influence in preventing a natural cure.

The following case is designed to illustrate, in some degree, the doctrine of the harmony which should ever exist between the "*healing art*" and the vital force of nature which we have referred to above.

In the year 1851, was called to see Mrs. —, æt. 21, then in the full time of her first labor. On making an examination, found the presentation to be a preternatural one. The part presenting could not at the time be exactly ascertained. In place of coming in contact with a round bony substance, the finger entered a cavity, in feeling, like that of the axilla. The patient was then placed in a proper position for a thorough examination, and to afford, at the same time, facility in turning, should the case require it. In making a second examination, we found, to our surprise, the head presenting; and when this circumstance was mentioned, the patient then declared that "she felt something turn within her." Was there not, in this case, spontaneous evolution? But the chief thing to be brought forward, in relation to the case before us, appears, as far as our reading extends, to be among the strangest of incidents. The truthfulness of this will be especially acknowledged in connection with the fact, that the pains and pulse were regular, the system cool, the *os* sufficiently dilated, and the parts well lubricated. In a word, the only obstruction discoverable, in any part of the passage of descent from the cervix uteri to the lower outlet, was the clitoris, which, by its preternatural dimensions, nearly filled the whole of the vulva. The pains were of the most severe kind, such as have been seldom witnessed even under the influence of the *Secale cor-*

nutum. Had we lost sight of the favorable state of the system at the time, and kept the eye singly fixed upon the uterine propulsive force, we would have concluded that everything with which the child should come in contact must be rent to pieces. So great and so rapid in succession were the pains, that the head was soon on the floor of the pelvis, and, of course, as the perineal tumor formed, a more than ordinary precaution, as some would teach, became necessary to prevent laceration. Gentle support, more assisting than revulsive to the efforts of nature, with free unexciting anointing of the soft parts, became imperative. The second stage of labor, notwithstanding the blocking up of the vulva, at least that degree of it which remained after the usual means for the diminution and dilatation of parts, continued, probably, not more than an hour, until, through nature's *vital force*, not only the head, but also, and without the usual pause, the child, entire, was born, but born, apparently, in a state of complete asphyxia, evinced, not only by the darkness of the face, but, likewise, by that of the body and feet. The chord was small and flaccid, while the attenuated frame gave full evidence of insufficient nutrition. However, by various means and untiring effort, resuscitation was at length effected.

In putting the hand under the child, we found something that seemed altogether preternatural to the touch, and which, at the time, was lost sight of; but after the chord was tied, and the child removed, we made an effort to ascertain what it could be. The hand being introduced under the clothes a second time, the thing referred to was found not to be the placenta, which was still firmly adherent, and which, with much caution, had to be taken away, while the former remained as before. After the removal of the placenta, the thing anomalous, was found to be the posterior half of the lining membrane of the vagina, with its usual appendages of bloodvessels torn from the *utero-vaginal symphysis*, down to the *labia minora*. Fortunately for the patient, the recto-vaginal septum was not destroyed, nor its integrity materially affected. There was, as might be expected, a great twitching of the spinal sacral nerves, and symptoms of uterine inflammation set up. The breasts, which were full and tense, became flat and flaccid, while the milk vicariously flowed from the vaginal orifice, and was full three months before it returned

through its natural channels. In a word, the prognosis drawn from the general symptoms was, in a high degree, unfavorable. The nature of the case required great watchfulness and care, and presented to the mind the following indications: First, to subdue all inflammatory action; Secondly, to calm the nervous irritation; Thirdly, to assist nature in her efforts to heal; and Fourthly, to adopt means to prevent contraction of the parts in the process of cicatrization.

In guarding against prolixity, we intentionally keep from giving in detail, or bringing out in strictly consecutive order, the *minutiae* included in the above indications. However, the antiphlogistic regimen was strictly pursued. The patient was confined to barley water and thin gruel. Small powders composed of hydrar. chlor. mit., ipecac., and sulph. morph. *tris-die*, together with enemas were administered. These, with sudorifics and abdominal fomentations, soon subdued the inflammation, and restored the suppressed lochia.

In attending to the second indication, it was necessary to look to the local lesion, in order that there might be no augmentation of the nervous irritation from that quarter, and which would tend to prevent the subjugation of that already existing. Here we had, in some measure, to anticipate the third indication, viz: to assist nature in the healing process. Mild vaginal injections were frequently employed to keep the lochia from irritating the raw surface with which it had to come in contact, and thus, so far, prevent any increase of an irritation already too great. But while the case demanded such preventives, it became necessary to administer nervous sedatives, such as spts. æth. nit., and spts. æth. sulph. comp., &c., which, while they answered their intended end, at the same time accorded well with the first indication.

In attending to the third indication, it was not only necessary to guard as much as possible against the influence of the acrid discharge by vaginal injections, but also by whatever would harmlessly assist nature in the healing process. This was, in part, accomplished by what may be called tallow vaginal bougies. These contained a slight admixture of finely pulverized alumen—such an admixture as would tend to heal the raw surface, and, at the same time, slightly constrict the relaxed fibres without contracting the caliber of the vagina, or suppress the lochia. In

order to accomplish this object, the bougies were made to differ in their circumferential dimensions, but so short as to lay quietly behind the clitoris, and, also, to facilitate their withdrawal, were furnished with wicks that extended without the vulva. By attending to the above means, with the occasional application of hot abdominal poultices, and thus preventing any suppression of the lochia by the alum, or in any other way, nature, assisted by her *vital force*, kept on the tenor of her course till all was right again.

Was afterwards called to attend the same lady in her second confinement, in which there was nothing anomalous except the absence of the liquor amnii, which, of course, would, as it did, render labor more tedious. This labor resulted in the birth of a plump and healthy boy. Mother and children are now doing well.

Considering the favorable circumstances of the mother during her first confinement—how, we ask, can the state of asphyxia, referred to above, be accounted for, unless by the abnormal presentation converted into a normal one by spontaneous evolution? Or how can we account for the attenuated condition of the child without some defect on the part of the mother, or placenta, and what was that defect? Or can we fix upon a defectiveness of the fundus uteri pathologically to account for the condition of the child; and, if so, would that give rise to the local lesion? Or can we account for this lesion on the principle of spontaneous evolution, or reflex physiology?

There is one thing we are certain of, whether we can solve the problem or not, viz: we do know that such is the recuperative energy of the system, generally, that if we can but make art subservient to the efforts of nature, she can and will accomplish her ends. But what wisdom is here required so as not to follow the suggestions of nature blindly, but in the exercise of a discriminating power—a power to perceive where she is too abrupt, or too tardy in her operations. The great principles of our noble science must be brought intelligently to bear on whatever case, however complicated, or apparently new, that may present itself before us; influenced more by the nature of the case itself than the mere name of a malady that has invaded nature's domain,

and there skilfully bring into requisition the resources of our art, that nature, through her able ally, may conquer all her oppressors, and rise in her glory and strength to reign until her delegated power must submit to the will of Him who gave it.

WOODSTOCK, VA., June, 1855.

ART. IV.—*Geranine*. By C. H. CLEAVELAND, M. D.

THE *Geranium maculatum*, or, as it is popularly called in various sections of our country, the *crane's bill*, *alum-root*, *spotted geranium*, and *crowfoot*, has attracted the favorable notice of American physicians from the earliest settlement of the country.

Barton, who gave a beautiful colored delineation of it in his *Vegetable Materia Medica of the United States*, published in 1817, says: "This extremely pretty plant is much more worthy of cultivation than many of the exotic species of the same genus, so universally nurtured in our greenhouses." He further says of it: "The medicinal virtues of *geranium maculatum* reside, exclusively, in the root, and these entitle the plant to be ranged under the head of astringents, in the *materia medica*. After saying thus much, it may seem unnecessary to enter into a detail of the particular diseases in which it has been recommended. The encomiastic, and sometimes ill-founded accounts of the medical virtues of a plant, which may have become the particular object of the favor or partiality of an individual physician, too frequently savor of empiricism, and, in fact, the exaggerated reports of the specific powers of medicines have not only done much harm, but never fail to bring into disrepute the subject which they were designed to offer to favorable notice. To no one of our native plants is this remark more applicable, and of none more true than the subject of this article. Not content with substantiating the claim which our native species of *geranium* has to a rank in the *materia medica*, as a powerful astringent, these physicians, and others who have been particularly led to the employment of it in the cure of diseases, have assigned to it specific powers which it certainly does not possess. With Prof. Barton, I am of the

opinion that the root of the *geranium maculatum* is very nearly a pure astringent, and have no doubt that the proximate principle which has been called "*geranine*," exerts no influence of any account except upon the *unstriated* muscles of the body.

Coelln is supposed to be the first writer who mentioned the medicinal virtues of this plant. He said: "*Geranium noveboracense (maculatum)*; decoctum, radicis hujus plantar ad dysenteriam nostratibus in usu est." Shoepf also said: "*Radix leniter adstringens, vulneraria habetur et ad dyesenteriam laudator.*"

The former erroneous opinions of the medicinal power of this plant, of which Barton spoke, seem to have pretty much passed away. Prof. Wood, in the *U. S. Dispensatory*, says: "*Geranium* is one of our most powerful astringents, and may be employed for all the purposes to which these medicines are applicable. The absence of unpleasant taste, and of other offensive qualities, renders it peculiarly serviceable in the cases of infants, and of persons with very delicate stomachs."

From the analysis of Dr. Stoples, as recorded in the *Journal of the Philadelphia College of Pharmacy*, vol. i. page 171, we learn that the *geranium* contains gallic acid, tannic acid, amadin, a little resin, and a crystallizable vegetable substance whose nature is not known.

The preparation which I send you has not been analyzed, but I suppose it to contain the tannic and gallic acids, the resin, and crystallizable substance, and perhaps the coloring matter of the root. Should any chemist wish, I would be pleased to furnish a sample for analysis, although at present but a very small portion has been obtained.

The sample I now send you was obtained by Dr. Hill, of the drug firm of "F. D. Hill and Co." of this city, from the root of the *geranium maculatum*, by a process almost identical with that which the *U. S. Dispensatory* directs for obtaining tannic acid from galls, only he used an apparatus for perpetual percolation, a drawing and description of which I also send. It is not yet ascertained how much a pound of the root will yield, as, in these first experiments in its manufacture, some losses and inaccuracies have occurred; but probably a pound of the root may be made to yield half an ounce of *geranium*. If so, it will be found that this powder is perhaps twenty-five times the strength of the crude

root, and as the dose of the root is said to be from ten to thirty grains, the dose of this will not exceed one or two grains.

Another preparation has been prepared and sold in this city under the same name, but with that I was so dissatisfied, as to have induced Dr. Hill to have an apparatus made, and try this method. The Messrs. Tilden, of New Lebanon, New York, manufacture a beautiful *Extract of Geranium*, which dries into a solid mass, almost crystalline, that can be rubbed up into a fine powder, and I send you a sample of that also, that you may compare these several preparations.

Within the few past years, the *geranium maculatum* has attracted the attention of several writers, and it is now ranked among the officinals of the Dispensatory, and of Pereira's *Materia Medica*, and it would seem only to require some convenient preparation, like the *geranine*, to lead to its general use by the profession.

139 SEVENTH ST., CINCINNATI, OHIO.

ART. V.—*On the Fevers which prevailed in Camden Co., N. J., during the year ending June 19, 1855.* By I. S. MULFORD, M. D.*

INTERMITTENT and remittent fevers began to prevail at the usual periods, but at first presented an appearance which was apparently impressed upon them by the prevailing epidemic.† The accession of each paroxysm would be marked by the occurrence of sickness and vomiting, and sometimes by urgent disorder of the bowels, so that the true nature of the case would be greatly obscured for the time. But few instances were met with in which there was not a disposition of the kind just mentioned. The alvine discharges were sometimes merely feculent, but often were

* Extracted from the Report of the Standing Committee of the District Medical Society, for the County of Camden.

† Asiatic Cholera. For an account of this epidemic, see Report of the Standing Committee of the Medical Society of New Jersey, p. 170, of current volume of the Reporter.

very copious and watery, and in one instance of strongly marked intermittent, there were large discharges of blood from the bowels, recurring with each of the paroxysms.

Yet, whilst these unusual features gave evidence of the operation of some new impressing influence, the peculiar specific nature of the complaint was still maintained, and thus there was manifested, in a remarkable manner, the different action of different causes of disease. It has sometimes been said that disease is really an unit; that inflammation is inflammation, however produced; that irritation is but irritation, let the cause be whatsoever it may. But the fallacy of these dogmas is made manifest in the course of such cases as have just been mentioned. Here, gastric and intestinal irritation, quite urgent in its appearance, is seen to arise, and to go on for a period. Had this arisen from any ordinary causes, as from cold or improper aliment, it would have advanced until checked by treatment, or until it had spontaneously ceased, and then would have entirely and finally disappeared. If the cholera influence had been in operation, and that alone, as in many other instances, occurring at the same time, the disorder would have advanced according to the manner belonging to it, and to it only. But another cause had come into action, that something which we call malaria, and which impresses a special character upon the diseases to which it gives rise. Hence, in these cases, the irritation set up in the intestinal canal was controlled, and subjected in its course to the miasmatic power. Instead of going on, in a steady uniform manner, until its final termination, it was seen to subside in a few hours, and leave the subject in a state of comparative comfort and health; but after a certain determined period, it was renewed, and advanced for a while, until its regular limit was reached as before.

In the treatment of the fevers of the season, it was necessary, of course, to pay regard to the special circumstances existing at the time. The gastric and intestinal disorder, which was so commonly met with, prevented the use of the ordinary anti-febrile remedies. Antimonials were scarcely ever beneficial, indeed, were often injurious, on account of their tendency to keep up irritation; and, to an extent, the same may be said of nitre, the neutral mixtures, and other articles of this class. Small portions of calomel were usually found serviceable, and in cases where

there was much pain or frequent discharges from the bowels, moderate doses of opium or sulphate of morphia were added. When circumstances appeared to call for them, laxatives were given, and, in these mixed cases, were generally entirely safe, but active purgatives were mostly avoided. The leading indications were, to render the secretions natural, allay uneasiness, and restrain inordinate action. A student, having inquired of the late Professor Chapman as to the proper mode of procedure, when intermittent fever was complicated with disorder of the bowels, he replied, that he would cure the bowel affection first, and the intermittent fever afterwards. With some qualification, this must be regarded as a safe and judicious rule, and one that was found applicable in the disease in the past season. Whilst the local disorder continued to be urgent, attention was necessarily directed to it specially. At the same time, this affection was not to be regarded as an exclusive thing; for, if this alone were treated, the disease might become continuous, each returning paroxysm serving, as it were, as a new starting point. Hence, though some degree of irritation should remain in the intestines during the interval, this period was still to be used for the administration of remedies designed to produce a general impression. Antiperiodics were to be promptly and freely given, and when the paroxysms could be in this way prevented, both that which belonged to the case as a strictly periodical disease, and also the intestinal derangement, would at once and entirely subside.

A word should be said in regard to prophylactic treatment. In latter years, and never more than during the past year, much difficulty has been experienced from the frequent recurrence of intermittents. This may have arisen, in part, at least, from the unusual nature of the cases. Such complications as have been noticed, besides their immediate consequences, would also produce and keep up a state of weakness, in which there would be much susceptibility to morbid impressions. But whatever effect may be attributable to this cause, it may be supposed that there is, too, some error or defect in our plans of preventive treatment. Greater attention to minor particulars would probably be found to be of advantage. Special directions should, no doubt, be given in regard to diet, clothing, exposure, and other matters of a similar nature. A proper medicinal course should also be

faithfully pursued, and that for a much longer period than the mere continuance of the paroxysms. The suggestions of the former standing committee as to the most effectual methods of breaking up the intermittent tendency, are worthy of notice, and have, probably, been kept in mind by the members. Upon the same point is a statement by Dr. Woodruff, an authority well known to the society, that, according to his experience, the use of quinine, in doses of three grains daily, upon the 11th, 12th, 13th, 18th, 19th, and 20th days after the arrest of the paroxysms, has almost invariably succeeded in preventing a recurrence of the disease.

Whilst upon the subject of fever, one or two points may be mentioned, to which it would seem desirable that some further attention should be turned. An opinion has gained ground in certain quarters, and to some extent amongst ourselves, that the disorder called *typhoid*, or sometimes *enteric*, fever, is but one of the effects of the miasmatic influence, and, consequently, not to be regarded as having a specific character of its own. It is certain that a disease, which, at least, most closely resembles typhoid, has been found to prevail, at the same time, and under the very same circumstances, as other autumnal fevers, beginning in the same manner as these do, and running on for a time in a parallel course. But it is urged, on the other hand, that genuine typhoid is very commonly met with at such times, and in such situations, as almost to preclude the idea of a miasmatic origin; that it occurs in the cold season, in the centre of cities, and in high mountainous districts. It is further alleged by some, that true typhoid occurs but once in the same subject, agreeing, in this respect, with the exanthemata, in which class, indeed, certain authorities believe that it properly belongs.

In order to arrive at satisfactory conclusions upon this question, close and continued attention will be required. In the first place, it will be necessary to determine what the true characteristics of the disorder really are, so that some other affection may not be mistaken for it. If, after such examination, it should be found that all the essential characters are met with, in cases occurring during the prevalence of miasmatic fevers, springing up and running on with them, there would seem to be ground for the belief, that whether the disease may ever arise from other causes than

malaria or not, it, at least, may sometimes be produced by it. If, however, it should be found that there is immunity from it after one attack, as is asserted by some who profess to have seen much of it, this fact would seem to remove it out of the sphere of our common autumnal fevers; and hence to this point careful attention should be given.

It has been stated that, during the past year, some diseases properly belonging to the warm season, linger on until a very late period. But the return of steady cold was finally productive of its usual effects. Bowel disorders, as well as fevers, disappeared in a great degree. Yet the diseases of winter did not come on in the usual manner, or rather to the usual extent. Eruptive disorders were not met with, except in a few sporadic cases. Catarrhal affections, and pleurisy and pneumonia, occurred in a few instances; but these complaints were not generally prevalent, and were rather moderate in form. The winter, and early part of the spring, may be pronounced to have been unusually healthy. Whether the forces that had prevailed during the preceding season, continued to be in operation, so far as to exert a kind of repressing action, and prevent the rise and spread of the usual disorders, or whether the causes of these latter affections were less active than in other years, it may not be easy to determine. But the former idea would seem to be somewhat favored by the fact, that almost immediately upon the recurrence of warmer weather, the complaints of the last summer and autumn again made their appearance. In the latter part of March, and throughout the month of April, dysentery of a decided character was quite frequently met with; indeed, it might almost be said to have prevailed as an epidemic; a very unusual occurrence at that period. Diarrhoea also became quite prevalent. All these complaints, however, were far more amenable to treatment than had been the case during the past summer; the cases mostly yielding readily to the ordinary remedies, and at this period, too, the diseases were not only milder in grade, but had also lost that something which had caused an intolerance of particular medicines. Anodynes were now well borne. The disorders just mentioned were almost the only ones occurring at the time, except that, in some localities, intermittents again sprang up, and became quite general, and in one neighborhood, too (near Waterford), typhoid

pneumonia is reported to have been unusually frequent. Still, the dominant morbid influence continued to be directed towards the alimentary canal, and, as the season advanced, this disposition appeared rather to increase, though a change was observable in some particulars. True dysentery was more rarely seen, whilst the diarrhoea, which before had been simple, assumed a character of increased severity. It was often attended with disorder of the stomach, and much sickness and vomiting. The alvine discharges were thin, and either colorless, or with only a faint yellow tinge. In some instances there were cramps in the extremities, and a bluish hue of the skin, with other symptoms, which seemed to denote a decided tendency to cholera. Yet the cases mostly eventuated favorably; but one death from this form of disease is known to have occurred within this period. The above mentioned disorder is that which is still prevailing, and which may be said to be the most common disease of the time. Whether it is to subside, and give way to other affections, or whether it may increase, and become a mortal epidemic, as was the case during the last season, no human foresight can determine.

ART. VI.—*Breaking down of a Stone in the Bladder, and discharge of many of the fragments before death.* By JOHN W. SNOWDEN, M. D.*

J. R., aged 72, was obliged, about a year before his death, to retain his urine until the bladder was very much distended. When he passed his water he had violent pain, the urine was bloody, and an attack of strangury came on, which continued several days. After this, he had repeated attacks of strangury, which were brought on by the slightest exposure to cold or moisture. Three months before his death the irritation of the bladder became permanent; the paroxysms of pain and tenesmus being most intense. About this time the bladder was examined by Dr. Fox, of Philadelphia, and myself, but we were unable to detect stone

* Extracted from the Report of the Standing Committee of the District Medical Society for the County of Camden.

in the cavity. The third lobe of the prostate was much enlarged. The urine was strongly acid, contained much pus and mucus, and was filled with floating crystals of lithic acid. During the last two or three weeks of his life, the patient passed thirty-five fragments of stone with his urine. These pieces of stone are nearly all fractured in a pyramidal form, and all have one smooth rounded surface. The fractured surfaces show plainly the concentric layers by which the stones were formed. They consist of phosphate of lime and magnesia, and a few thin layers of lithic acid. Upon examination after death, I found the bladder contracted to one-fourth its natural size, its walls full half an inch thick, and the cut surface resembling a muscle cut transversely; the third lobe of the prostate about three fourths of an inch in length, and half an inch in its transverse diameter. In the cavity of the bladder I found *seventy-seven* pieces of stones and one whole stone, showing the original form of the broken ones, making, with those passed before death, *one hundred and thirteen*. Their size varies from that of a marble down to that of a pea. The remarkable features of this case are: the rapidity with which the calculi were formed, if it be admitted that there were none in the bladder at the time it was examined; and their fractured condition, which must have been effected by contraction of the abnormally developed muscular coat of the bladder.

BIOGRAPHY.

ART. VII.—*Biographical Memoir of Charles A. Pope, M. D.*

DR. POPE was born in Huntsville, Alabama, on March 15, 1818, consequently, being now in the 37th year of his age.

His primary education was received at Greene Academy, in his native town. He subsequently passed through the prescribed courses of collegiate study in the University of Alabama, and immediately afterwards commenced the study of law. Finding, however, that the sedentary habits necessary to its prosecution, were incompatible with his then rather delicate constitution, he abandoned it for the study of medicine.

He began his medical studies with Drs. Fearn and Erskine, of Huntsville; the former being already widely and well known as a surgeon, and the latter ranking high as a physician. For both these gentlemen, Dr. Pope has always entertained high admiration and regard; he has always looked upon them as perfect types and exemplars in a social as well as a professional point of view. It was doubtless fortunate for the subject of this notice, that his early professional education was confided to such men. His own early eminence may be in a great degree attributable to their influence and example.

Dr. Pope attended his first course of medical lectures in the Cincinnati Medical College. Dr. Drake was then at its head, and in the height of his fame and popularity as a teacher. He was the idol of the class, and has always been regarded by Dr. Pope as one of the "greater lights" of the profession in this or any other country or age.

At the age of 21, Dr. Pope received his degree from the University of Pennsylvania, and soon after repaired to Europe for the further prosecution of his studies. It was in the city of Paris, in Nov. 1839, that the writer of this brief notice first became acquainted with the young surgeon, for he had already begun to manifest his predilection for this branch of the profession. He was then noted as the most expert and neatest operator on the cadaver, amongst us. His friends, acquaintances, and teachers, even at that early day, predicted that he would in after years rank with the renowned masters of the noble and daring art.

He remained in Paris nearly two years, and afterwards visited the great continental schools, as well as those of Great Britain and Ireland.

It was on January 1, 1842, that Dr. Pope commenced the practice of his profession in the city of St. Louis, where his studious habits, high moral worth, and gentlemanly bearing, soon brought him into public notice and favor. In 1843, he was unanimously chosen Professor of Anatomy and Physiology, these chairs being then united in the Medical Department of the St. Louis University, a position for which he was not slow in proving himself fully competent. In 1846, he again visited the Old World, and furnished, during his absence, various contribu-

tions to the *St. Louis Medical and Surgical Journal*. In 1847, he was transferred to the chair of Surgery, at which time he had acquired considerable reputation as a judicious surgeon and skillful operator. It cannot but be regarded as a fortunate circumstance for him, that he delivered three courses of lectures on anatomy, before his accession to the chair of surgery; to this fact, no doubt, is to be attributed in a great degree his rapid success as a teacher and practitioner of this his favorite branch. In 1848, he was chosen dean of the faculty, an office which he has ever since held.

As a lecturer, Dr. Pope is rapid, clear, and concise; he is fluent, but makes no effort at oratorical effect. Few men can say more, or teach more, in an hour, than he. With the history and literature of surgery he is perfectly conversant. He is familiar with all the doctrines and modes of operating extant, and well may he be, as his entire attention is, and has been for years, devoted to them. He eschews the practice of medicine, consecrating himself solely to the teaching and practice of surgery. His collection of instruments, preparations, drawings and models, illustrative of his branch, are unexcelled by any private collection in the country.

As an operator, he is calm, confident, expeditious, full of resources, and, it may be added, eminently successful. Perhaps no surgeon of his age, in the country, has performed as many operations as he. This fact is not attributable to the absence of competition, for he found, on his arrival in St. Louis, three surgeons high in public estimation. Dr. Beaumont was then in his glory, and he, venerable man, was among the first to discover and rightly appreciate the talents of the future surgeon of the far West. Dr. Pope's connection with the St. Louis Hospital, as well as with the City Hospital, and the circumstance of St. Louis being a centre, attracting surgical cases from the surrounding States and Territories, will in part, perhaps, account for his extensive practice and frequent operations. As yet he has not handled his pen as much as his knife. He has not written a great deal. His contributions to surgery, however, though few, are valuable, and they have been extensively copied and frequently referred to as of standard authority.

A proper notice, however brief, of Dr. Pope's career, thus far

requires a tribute to his liberality and devotedness to the medical department of the St. Louis University. To him, in a great degree, the school is indebted for its success; and, in this connection, justice demands the mention of the name of his father-in-law, Col. John O'Fallon, a man whose princely wealth has always been employed in behalf of the best interests of his city and his State—of humanity and of science. To him, the subject of this memoir, and his colleagues, are indebted for the ample halls of the St. Louis Medical College, and the public Dispensary thereunto attached.

Ten years ago, one of Dr. Pope's colleagues spoke of him in a public address, a valedictory, as follows: "Our professor of anatomy is yet a very young man, but I predict that in ten years he will rank among the first surgeons of the country." That prediction has been fulfilled, and Dr. Pope is yet a young man. Ten years ago, St. Louis was not what it now is; then it had only a population of 40,000 souls, now it contains 130,000. What will the city and its institutions be in ten or twenty years more? May they not fully rival those of the east and of the Old World? May not the name of the young surgeon of the west rank with the most venerable names of the profession, and may he not bequeath to the institution which he has so efficiently contributed to build up, and to the profession, a fame equal to that of a Wistar or a Physick?

PROCEEDINGS OF MEDICAL SOCIETIES.

ART. VIII.—*Extracts from the Minutes of the New York Pathological Society.* Specially reported for the New Jersey Medical Reporter, by E. LEE JONES, M. D., Secretary.

REGULAR MEETING, June 13, 1855.

Sarcina Ventriculi.—Dr. CLARK presented a specimen of *sarcina ventriculi* under the microscope, the first time ever exhibited to the Society. The specimen was obtained from a gentleman, who has had three attacks of passages from the bowels of a large amount of dark-colored material, resembling blood. The same substance has also been ejected from the stomach. For a year and a half he has been subject to vomiting; the attacks, of late, being less frequent and less abundant, preceded for 24 hours by distress, heartburn, and flatus. On Sunday week, the patient sent him a note stating he has had an-

other attack. The matter vomited was of a transparent nature, somewhat resembling the white of an egg; a portion was composed of mucus, and parotid fluid, and a part was of a grayish brown hue, which has subsided to the bottom of the vial. Upon submitting this to the microscope, one-half was found to consist of *sarcinae ventriculi*; the square cells of which were sometimes united in double linear rows, sometimes in sheets of moderate extent, sometimes seen separated and single. These cells did not exhibit well the central cross markings; but the spore in each of the four angles, was developed into a distinct organ. The power, required to exhibit the specimen, was a medium eye-piece, with Spencer's $\frac{1}{2}$ objective, magnifying power about 800; with the $\frac{1}{2}$ it was impossible to analyze the elements of the cell. The other portion consisted of starch, the fibrinous elements of the food having been dissolved by the fluids of the stomach. There was an entire absence of conoidal cells and follicle cells. He regarded the existence of *sarcinae* as depending upon a morbid condition of the mucous membrane of the stomach, and that this state permits the presence of *sarcinae*; or, in other words, is a result, and not a cause of disease, just as the *oidium albicans*, in *muguet*, attends an inflamed mucous membrane, the healthy epithelium not serving as a nidus for its development.

Disarticulation at Knee-Joint.—Dr. MOSES presented the *tibia* and *fibula* removed by the operation of *disarticulation* at the *knee-joint*. The patient, a Mexican, Jesus Senna, aged 26, in June, 1854, received a gunshot wound in the left leg, fracturing the *tibia*. He has been under treatment during this time, and many pieces of bone had been discharged or removed. About the 22d November, he was first seen by Dr. Moses, who found the whole leg much swollen and hard, skin rough and scaly. Along the whole course of the *tibia*, the skin was thin, with numerous openings, discharging a greenish unhealthy matter; the probe everywhere indicating carious bone. His health was feeble, and he was suffering from an attack of intermittent fever. He was conveyed to the hospital, and placed upon quinine and good diet. By these means his condition was improved, and Dr. Moses determined to remove the limb. As there was no disease about the joint, and, as he thought, sufficient healthy tissue to make a posterior flap, he selected the section at the *knee-joint*. A small quantity of chloroform put him in a proper state for operating. The *disarticulation* was effected in less time than is required in the ordinary operation in continuity, after Hoin's method. After making the flap, it was found hard, fibrous, and degenerated into a substance resembling cancerous matter. It was necessary to dissect off this substance before the flap could be made to cover the stump. Having no one to attend to the proper administration of chloroform, the handkerchief was retained over the mouth longer than intended; at one time, respiration ceased, and the pulse could not be felt at the wrist. The application of aqua ammoniac, and fresh air to the lungs through a tube, restored both. The articular surface of the femur was perfectly healthy, and both it and the patella were left untouched. The flap fitted well, and was secured by stitches and adhesive plaster. After the operation, stimulants and quinine were freely administered.

December 1st. Has continued to progress favorably in all particulars. Complained of some pain and tenderness about the external condyle. On dressing the stump, at the painful point and beneath the flaps were found a hundred maggots, which were removed by alcohol and the forceps; in all other respects, the flaps and stump presented a healthy and beautiful appearance.

Jan. 4th. General health much improved. No untoward circumstances have occurred to impede his recovery; the edges are entirely healed, the stump firm and painless: he left the hospital to-day, and rode home on horseback, about six weeks after the operation.

After maceration and cleaning, the *tibia*, for two-thirds of its length, was found broken up into small fragments, the fracture extending to within an inch and a half of the head of the bone, and two-thirds of its length down-

wards; and around the whole, a beautiful basket-like frame of new bone inclosing and retaining numerous sequestra. The fibula was untouched.

Dr. MOSES also presented a *urinary calculus*, oxalate of lime variety, removed from a colored man 33 years of age. After two weeks' preparation, he operated.

Dr. BUCK remarked that he had performed this operation of disarticulation at the knee-joint, three times at the New York Hospital; two of the cases having a successful termination. One of them occurred in a man about 55 years old. In this case there was, after the removal of the limb, very protracted suppuration, the pus burrowing to the middle of the thigh, and also obstinate severe diarrhoea; the other was a boy 15 years of age, whose leg was extensively crushed by a railroad accident. Severe suppuration followed for two or three months—he excised portions of the condyles—the patellæ remained in both, and the flaps in each were scanty. The third, unsuccessful, was a young man about 20 years old; he died some ten or twelve days after the operation, the inflammation being very severe. Dr. J. Kearny Rodgers once or twice performed the operation unsuccessfully.

Dr. MARKOE stated he had himself exarticulated the knee recently. It is now four weeks since the operation, and the patient, 2 years and 2 months old, is progressing favorably. He made the long flap from the anterior surface, and the short one behind; this method throws the cicatrix posteriorly, and out of the way of an artificial leg.

Dr. W. PARKER stated that, several years since, he had successfully performed the operation. Secondary hemorrhage occurred a few days after, rendering it necessary to open the wound.

Dr. CLARK inquired the advantages to be gained in operating at the knee-joint, in preference to the inferior portion of the thigh? In reply, it was stated by Drs. BUCK and MOSES, that the broad surface of the stump afforded a better adaptation of an artificial limb, that the motions of the stump were more perfect, in consequence of the attachments of important muscles being undisturbed, and the absence of the liability of protrusion of the bone.

Dr. BATCHELDER observed that he had no personal experience to present on the subject. When the operation in question was agitated, twelve or fifteen years ago, he turned his attention to it. In considering the best method of procedure, he recurred to the subject, and thought the more preferable plan to be that of the anterior flap, which could be formed with precision; and sawing off the condyles of the femur one inch, the cicatrix was thrown completely behind, the patella turned over the condyles, thereby restoring the original length of the limb.

Fibrous Degeneration of Uterus.—Dr. GOULEY presented a specimen removed from a negro woman, 60 years old, consisting of the uterus, bladder, large and small intestines, glued together by old and firm adhesions; a communication existed between the rectum and ilium. The uterus was converted into a hard fibrous mass. No particulars of the case could be obtained.

Hydrorachitic Tumor.—Dr. HOLCOMB exhibited a *hydrorachitic tumor*, removed from a child four months old. In Feb. he attended Mrs. Jas. Goddin, who was of strumous constitution, during her confinement, and delivered her of a child weighing six pounds. It was lively and strong, moved the upper and lower extremities freely, and evacuated naturally. The head was normal. Its breathing was strongly croupous in character. Over the inferior lumbar and upper sacral vertebrae, a fluctuating tumor, of a marbled appearance, as large as an English walnut, was observed. It was recognized as a *spinabifidous tumor*. At the end of a month, the child began to emaciate, and the croupy breathing became louder. The tumor increased, and it, with the fontanelles, gently rose and fell during inspiration and expiration. The weak condition of the child prevented the attempt of an experimental operation. As the weather became warmer, the child improved, becoming stronger and more fleshy. The tumor, however, continued to increase, and

measured six and a half inches in circumference. Pain was caused when pressure was applied, and great turgidity of the face ensued. The child died of apparent exhaustion four months after birth.

Post-mortem, June 12th.—Unusual flaccidity of the body. The tumor was shrunken, and the surface entire, though thin at the centre. Its contents, of a sanious, glairy character, escaped when the spine was divided. The examination of the head was not permitted. On making an incision into the tumor, it was found that the posterior portion of the long canal, surrounding the spinal cord, is wanting over several of the vertebrae.

Resection of Head of Femur.—DR. LOUIS BAUER presented the head of a femur, resected a few days since from a boy 7 years old, who was received into his Institute four months ago, for treatment of hip-joint disease. His health was good, and gave encouragement that the disease might terminate favorably by resolution. The position of the limb was everted, abducted and semiflexed; the joint fixed, and the pelvis somewhat depressed—a position of great diagnostic value, showing invariably the presence of effusion within the joint, proved by experiment and puncturing. Gentle antiphlogistic local measures, absolute rest, and appropriate constitutional treatment were followed. In this position the limb remained ten weeks, when suddenly the extremity was shortened two inches, inverted and adducted, the pelvis drawn upwards and rotated. Dr. B. inferred that the capsule had given way and its contents escaped. During the ensuing six weeks, however, the matter did not make its appearance, and he suspected the acetabulum might be perforated. The patient suffered from loss of rest, appetite failed, and emaciation increased. Under these circumstances, it was evident that some measures must be done to relieve the patient. Upon consultation, it was concluded to bring the patient under the influence of chloroform, and make a careful examination of the joint. This was accordingly done, and the following conditions observed: mobility of the joint, crepitus, caries of the articular surfaces, the greater trochanter elevated and inclined towards the anterior superior spine of the ileum, probably dependent upon enlargement of the trochanter itself, and partly upon softening and widening of the acetabulum; there was no evidence of pus; great resistance of the adductor muscles. It was determined to remove the diseased portion of the femur. The operation was performed. During the progress of the operation, the diagnosis was singularly confirmed. The trochanter was found considerably enlarged, the capsular ligament greatly thickened, ligamentum teres destroyed, acetabulum enlarged and softened at the upper rim. At the point of insertion of the round ligament a small opening existed, through which probably the contents of the cavity had escaped.

The specimen before the Society consists of the head, neck, and large trochanter of the right femur; the head is somewhat flattened, its cartilage, for a small space, destroyed, and the adjoining bone bare (hence the crepitus); neck shortened, and the bone at large softened; its cancelli filled with small blood clots and organized fibrin. On dividing the bone, no tubercular deposits were discovered.

Dr. BAUER desired to call attention to this specimen only in a pathological and diagnostic point of view, while the value of the treatment adopted in this case would be hereafter determined. When he had accumulated a sufficient number of cases, he would be prepared to bring the question to a conclusive test. The present is the fourth case he has exhibited to the Society, and as some interest has been evinced by members, as to the results of those previously presented, he would state, that one of the patients died from the effects of diphtheritic croup, whilst the diseased joint had been progressing favorably up to that time. The second patient is so far recovered as to use his leg, which is shortened only half an inch, and in no way deformed, which he regarded as the chief benefit of his mode of treatment. The third patient was doing well. In reference to the latter, he would state that, from the

very time of the operation, pain and fever subsided, rest and appetite returned, and he considered the patient greatly improved and his condition highly encouraging. He hoped to have the pleasure, at a future time, of showing the patients themselves to the Society, and demonstrating the usefulness of the limb after resection of the femoral head.

Carcinoma of Liver.—Dr. CLARK presented for Dr. METCALFE a specimen of carcinoma and cirrhosis of the liver.

History of the Case.—Wm. Mountjoy, aged 45, England; admitted May 7, '55; occupation, a stevedore. Family healthy. Has been in this country 25 years. A hard drinker. Fourteen years ago had venereal disease for two months, chancre and suppurating buboes. Intermittent fever, 11 years ago; a tertian for two or three months. Just after recovery from this, was admitted into City Hospital, where he was treated for four weeks; the patient is ignorant of his disease; represents himself as out of his head some of the time; was cupped and leeches over stomach, which he thinks was swelled. Has had pains in bones at various times, but was never laid up with acute rheumatism. Seven years ago he broke seventh and eighth rib at junction with cartilage—was laid up two or three weeks. About twelve months ago, abdomen began to swell, increasing in size very gradually. Two months thereafter had an attack of dyspnoea, which has recurred at various intervals since. Was not incapacitated for work till fortnight before admission. About the time his belly commenced to swell, patient had an attack of dysentery, and his bowels have since been in a very irritable condition. Six weeks ago a second attack of dysentery, when blood was passed, which did not happen before.

Cough.—Has had a little all winter.

Pain.—Has not felt any of moment about his abdomen till a fortnight before admission, when feeling pain at bottom of sternum, on rubbing the part he felt a lump there. The pain was of a sharp twitching nature, as patient expressed it, very different from soreness, which, probably from swelling, existed over whole abdomen. Had not felt this pain previously, but it has continued since.

Vomiting.—A good deal mornings, generally threw up his breakfast, which was very light; not thus troubled at other times of day. Has at times eructated a little blood; the first time six months ago.

Appetite.—Moderate, except in morning, when it is entirely wanting. Has never noticed himself jaundiced.

Present Condition.—Much emaciation, which came on only during the past two or three months. Skin sallow, but not jaundiced. Conjunctiva clear. Tongue furred in middle, red at edges, but not yellow. On his admission, belly alone was swollen; a week after feet began to swell, and the oedema gradually extended up leg and thighs. Urine at this period examined was decidedly albuminous. Cutaneous veins of abdomen numerous and enlarged.

June 2.—Paracentesis abdominis was performed; nine quarts drawn off, greatly relieving the dyspnoea. Fluid was transparent, slightly yellowish. Hepatic dullness soon became more obvious, extending from margin of fourth to seventh rib, vertically. Filling up angle made by hypochondriacal margins is a tumor $5\frac{1}{2}$ inches vertically, by seven horizontally, hard, irregular, nodulated on surface; by rubbing fingers over skin covering it, a distinct friction fremitus is perceptible. No central depression of nodules can be perceived. The tumor mentioned has its inferior boundary like that of a hardened and thickened liver. Pulsation is communicated to epigastrium from abdominal aorta. After operation, abdomen quickly filled, although compressed by bandage. Patient failed rapidly, and died June 11, at 3 P. M.

Autopsy 25 hours after death; weather cool. Body emaciated, livid about head and chest; slightly so about inferior extremities, which are oedematous. Abdomen distended with gallons of fluid.

Thorax.—Lungs very slightly adherent, on right side, to walls of chest. Pulmonary tissue healthy, with exception of many small spots of cancerous matter, varying from size of small shot to a filbert.

Heart.—Normal in size and appearance.

Abdomen.—*Omentum* small, containing but little fat; very much thinned and contracted; covered with small granular matter.

Liver.—Weight, five pounds eight ounces; presents on right lobe well marked cirrhotic degeneration, with here and there a small, white cancerous tubercle not larger than a shot, excepting along median line, where cancerous matter is abundantly deposited. Proportionably much more encephaloid matter in left than in right lobe, where also it exists in large nodules. Diaphragm over space size of palm of hand, at posterior and middle portion is connected to liver by cancerous exudations. Peritoneum shows signs of inflammation in neighborhood of cancerous deposits generally.

Kidneys.—Not examined microscopically; to all appearances healthy, although albumen in urine drawn after death.

Enlargement of Testicle.—Dr. FINNELL again exhibited the case of enlargement of the testicle presented at last meeting, and desired to make some additional statements. On a more careful examination, the testicle itself was found free from disease; the enlarged mass grew from the cord; the trocar had been twice introduced for hydrocele. Microscopic examination proved it to be composed of fatty tissue and fibrous masses throughout the growth.

Wound of Heart.—Dr. FINNELL then presented the heart of a man who died half an hour after receiving a stab of a knife, entering the left ventricle; the opening in the heart was more extensive than the wound of the pericardium; a large quantity of blood was found in the heart, entirely fluid.

Strangulated Hernia—Operation—Death—Dissection.—Dr. MARKOE presented a specimen of *strangulated hernia* occurring in a young man nineteen years old, who applied at the New York Hospital on Thursday last, suffering from symptoms of strangulation, which had existed for twenty-four hours. The tumor was exceedingly small, and protruded just beyond the external abdominal ring. By proper manipulation, it was readily reduced by the house surgeon. His immediate symptoms were relieved, but he still complained occasionally of fugitive colicky pains in the abdomen. On Monday following, Dr. MARKOE's attention was for the first time called to his condition. His former symptoms were reproduced. He vomited a substance of a somewhat fetid, fecal odor; there was slight tenderness of the abdomen on pressure. By careful examination, he felt a small tumor in the inguinal canal, a little distance from the external ring. He thought the case to be one of strangulation and reduction in mass. Opposed to this view, however, was the circumstance of a reduction in mass in a recent *hernia*, almost unheard of. Upon consultation, it was determined to operate. He accordingly cut down upon the inguinal canal, making an incision two and a half inches in length, through the tendon of the external oblique muscle, down almost to the external ring, which was not involved in the cut. The tumor was found in the inguinal canal, and contained a knuckle of intestine in a fair condition. The seat of stricture was found to be the neck of the sac, which was divided, and the protruded mass returned into the abdomen. The patient died on the third day after, of general peritonitis. Previous to death, a small tumor was observed on the cord, just external to the external abdominal ring, which Dr. M. thought might possibly be a small hernial protrusion, which had escaped under the bandages. He cut it open, and found it to be a portion of the sac, which, at the operation, was not noticed; it was merely a prolongation of the sac downwards, and the finger passed freely toward the abdomen. On making a careful dissection of the parts, was found, beginning at the peritoneum, a rounded, small opening, leading from the general cavity down into the sac, from which the hernia had been reduced. This sac lay along, and to the inner side of the cord, and was closely attached to it. It was three inches long, and narrow like the finger of a glove. It presented two openings on the anterior aspect, which were the two incisions made in the operations, and terminated by an abrupt cul-de-sac, just below the last and lowest incision.

Immediately below this lower termination of the sac, was a small, elongated sac, situated on a line with the sac above, of which it seemed at first to be a continuation. It had, however, no communication with the upper sac, being separated from it by a septum so thin as to be translucent. It contained a little reddish serum. It was an inch long, and approached the proper tunica-vaginalis testis so nearly as only to be separated by a membrane, less than a line in thickness. The tunica vaginalis and testis were normal.

These circumstances, observed Dr. Markoe, show the case to have been one of hernia of the tunica vaginalis, in which actual descent of the hernia had never occurred, until the occasion in which it became strangulated and caused death. The congenital sac was closed off in two places, one just at the testicle, the other about an inch above.

BIBLIOGRAPHICAL NOTICES.

ART. IX.—*Clinical Lectures on Paralysis, Disease of the Brain, and other affections of the Nervous System.* By ROBERT BENTLEY TODD, M. D., F. R. S., Physician to King's College Hospital. pp. 311. Philadelphia: Lindsay & Blakiston, 1855.

DISEASES of the Nervous System increase in interest and importance in proportion as civilization advances, and the intellectual powers are cultivated. Hence, the importance of investigations into the anatomy and physiology of the cerebro-spinal system, of the diseases to which it is subject, and their treatment.

The book before us consists of twenty lectures on the principal diseases involving the nervous system. Besides paralysis and disease of the brain, which occupy the first seven lectures, the following are made the subjects of attention: renal coma, delirium, the various forms of hemiplegia (occupying seven lectures), epileptic coma, lead palsy, disease of the dura mater, trismus, tetanus, chorea, local hysteria, and catalepsy. We regret that so little space is devoted to the four or five last named affections, as they are really among the most frequent and troublesome of these nervous disorders, and less is said about them in our text-books than of some of the more grave, albeit less frequent diseases. However, we will not complain; especially as more is promised on the same subject, if this work is found to supply a want in the profession. We consider it eminently worthy the attention of our readers, and trust that its author will receive sufficient encouragement to induce him to fulfil his promise of giving us more of his experience and observation.

The publishers have done their part in presenting the work to its American readers in an attractive dress, printed in good type, on fine paper.

ART. X.—*Report of the Sanitary Commission of New Orleans on the Epidemic Yellow Fever of 1853.* Published by authority of the City Council of New Orleans. pp. 542. N. O.: Printed at the Picayune Office, 1854.

THE city of New Orleans did something for science when her Board of Health appointed the Sanitary Commission, whose report lies before us. The value of such a work can scarcely be estimated, and if anything is lacking, it is a record of the names of the men composing the Board who ordered the commission. The Sanitary Commission was composed of Hon. A. D. Crossman, mayor of the city; Drs. E. H. Barton, A. F. Axson, S. D. McNeil, J. C. Simonds, and J. L. Riddell. The labor was divided between the five physicians, and its result is creditable to their science and industry, and will, we believe, be of lasting benefit to mankind. The largest part of the labor, however, seems to have devolved upon Dr. Barton. The commission did not confine their inquiries to New Orleans and its vicinity, but pushed them in every direction, Mexico, South America, the West Indies, &c. We are happy in being the fortunate possessor of this valuable work, for which we are indebted to our friend, Dr. N. B. Benedict, of New Orleans.

* * Since the above was written, we have received from Lindsay & Blakiston a reprint of Dr. Barton's portion of the Report, under the title *Cause and Prevention of Yellow Fever.*

ART. XL—1. *The American Eclectic Dispensatory.* By JOHN KING, M. D., &c. &c. pp. 391. Cincinnati: Moore, Wiltach, Keys, & Co., 1855.

2. *The American Eclectic Practice of Medicine.* By J. G. JONES, M. D., &c. To which are appended the posthumous writings of T. V. MORROW, M. D., &c. 2 volumes, pp. 788, 862. Cincinnati: Moore, Anderson & Co., 1853.

IF the "American Eclectic Practice of Medicine" is to be judged of by the size of its books, it is a "big" science, having a big constituency. We have never, however, felt willing to accord

either to "Eclecticism," though it may be because we are so many removes from its hotbed. The "Eclectics" claim to be *reformers* of the science of Medicine, their chief claims to the title consisting in a crusade against the preparations of mercury, and blood-letting, and in endeavors to develop the virtues of our indigenous *materia medica*. The former ill accords with their monopoly of the term *eclectic*, while the latter is certainly very creditable to them, and will eventually serve the cause of medical progress. We have no objections to our Cincinnati friends treating all diseases without the use of mercury or the lancet, if they can do it as well and as quickly as if they used these agents—which we very much doubt—but they can certainly do this without arrogating to themselves a title which hardly belongs to them, or without uniting in the hue and cry against the profession of medicine which is so characteristic of ignorance and prejudice. It seems to us that this class of practitioners of medicine have placed themselves in a false position, by first fostering, and then taking advantage of popular prejudices against certain remedies used by regular physicians. From this false position the Cincinnati eclectics seem to be gradually extricating themselves.

We have not been able to perceive anything in the works named at the head of this article, worthy of special notice, except the prominence given to indigenous remedies and their *active principles*, and the determined opposition to the employment of bloodletting, and the preparations of mercury in the treatment of disease. While in the *Dispensatory* most of the mineral preparations are spoken of and recommended, we cannot find that mercury or any of its preparations are so much as named, not even to "damn them with faint praise." It may have been necessary to omit them to reduce the size of the book!

The pharmaceutical portion of the *Dispensatory* seems to have been prepared with considerable care and deliberation, and the Appendix contains much that is valuable. We would recommend this work to the attention of our readers as worthy a place in their libraries, mainly on account of the information it contains on the subject of our indigenous *materia medica*.

EDITORIAL.

SANITARY INSTITUTIONS (MAISONS DE SANTÉ).

WE have never been able to account for the indifference of the American medical profession to private institutions for the treatment of chronic diseases; and yet we venture the assertion, that there is not a physician of any experience, who reads this remark, who has not often had cases of sickness which he has longed to have under his own immediate supervision, separate from family and other influences and cares, which prevent him from doing either himself or his patient justice. It is well known that there are many complaints, particularly of females, which cannot be properly treated at home, where the patient is not only surrounded by almost every conceivable moral influence of an adverse character, but is often compelled, literally, to drag herself about, performing or overseeing household duties, which have, of themselves, perhaps, induced her state of ill health. There are appliances, too, for the alleviation and cure of diseases, which cannot be used to advantage by the general practitioner.

This lack, on the part of the profession, of proper means for the treatment of disease, is manifested in various ways; first, in the thousands of invalids who either go, or are sent by their medical advisers, to mineral springs, and to the sea-side, to the mountains and the vales, or, it may be, hundreds of leagues away over the bosom of old ocean, all in the hope—often a delusive one—of recruiting health, under, perhaps, the most disadvantageous circumstances; secondly, in the hundreds who annually resort to water-cure establishments, where they are seldom properly treated, and where, in spite of which, many are benefited, to the praise of that special mode of treating disease, and the disadvantage of scientific medicine; change of scene, associations, a regular and prescribed diet, exercise, bathing, &c., doing for them what is very naturally attributed to the excellence of the “water-cure” system of treatment; and, lastly, in the far greater number of those who suffer from, and die of, diseases which are amenable to treatment, provided the practitioner possesses or can use the necessary appliances, or so control the movements and duties of the patient, as that he may be benefited by the means employed to arrest disease.

Now, why should such patients be permitted to suffer from their ailments, or left to seek equivocal benefit at cold-water establishments, or exposed to the discomforts of travel and the watering places? There is no question but that well conducted establishments, under the charge of intelligent practitioners, who will avail themselves of all the resources of science in the treatment of disease, would be well patronized, and be extensively useful.

A few efforts have been made in this line, in this country, we believe, with success. Dr. Charles T. Collins, formerly of New York, is at the head of a flourishing sanitary institution, in Great Barrington, Mass.; and there is one in connection with Starling Medical College, at Columbus, Ohio; and we have recently received the announcement of one to be located at Knoxville, Tenn. New Jersey would be a very appropriate place for the establishment of one or two institutions of this kind, and we hope that we shall have occasion ere long to announce that it has been done.

CATHETERIZATION OF THE AIR-PASSAGES.

The following account of the discussion of this question, in the July meeting of the New York Academy of Medicine, is taken mainly from the August number of the *New York Medical Times*.

The meeting was principally occupied with the discussion upon the majority and minority reports on the paper read before the Academy in December last, entitled "On Injection of the Bronchial Tubes and Tubercular Cavities of the Lungs." The discussion was calm, dispassionate, and, for the most part, free from unpleasant personalities. In the way of argument, but little was offered that was not to be found in one or other report, which seem to have presented the whole subject as at present known to the profession. It was conceded that, under certain conditions, flexible tubes could be passed into the trachea, and that the honor of their introduction is due to Dr. Green: but, at the same time, it was demonstrated that even Dr. Green had failed in the introduction of the tube with a small curvature (his own instrument), in ninety-two per cent. of the trials before the committee. The tube with large curvature, as used by Dr. I. E. Taylor, was introduced successfully in eight out of thirteen cases, so that Dr. Green may be said to have been beaten upon his own ground. With

regard to the introduction of the sponge probang below the vocal chords, Dr. McNulty contended that the operation was impracticable, in consequence of the anatomical structure of the larynx, which he demonstrated by means of a wet preparation and large drawing. He stated that he had been in the frequent habit of cauterizing the larynx, as he supposed, by means of the armed probang, but he was convinced that he had never passed the instrument into the larynx, but into the œsophagus. Dr. Green made a long statement in defence of his propositions, in which he did little more than reiterate the arguments set forth in his paper; he accounted for his failures before the committee from the fact of the patients not having been previously prepared for the operation, as is his custom, and also from the mental perturbation and nervousness resulting from the presence of an unusually large number to witness the operation. In reply to an inquiry by Dr. Watson, whether he (Dr. G.) had ever injected tubercular cavities, he stated, that *he did not claim to have done so*, but had merely suggested the idea that it might be done. Yet we find his paper entitled "On Injections into Tubercular Cavities." Dr. Green stated that this title had been appended by Dr. E. H. Parker, editor of the *American Medical Monthly*. When reminded that the same title is affixed to his paper read before the State Medical Society, he stated that it was copied from the published paper. Dr. Green expressed great surprise that the committee should have doubted the practicability of passing the armed probang below the vocal chords, while they admitted that flexible tubes could be introduced. He stated that the committee well knew that the probang could be so passed, and that some of them had often passed it themselves. When asked whether he could direct the tubes into the right or left bronchus *at will*, he contended that he could do so; but his explanation of the method did not seem to satisfy the Academy. He closed his statement by allusion to the opposition he had met with since he had first put forth his claims to priority; commented on the acknowledgment of those claims in England, expressed his determination to persevere in the attempt to establish them, and his willingness even to die in defence of the truth. Dr. Gunn stated that a patient of his had been under treatment by Dr. Green, by injection of the bronchi, as was asserted; but that every such injection had been followed by very profuse diarrhoea. Dr. Gunn was induced,

from that, to suppose that the injections were thrown into the stomach instead of the bronchi. The discussion was protracted until a very late hour, when the whole subject was laid upon the table. The sense of the Academy, so far as could be judged, was strongly in favor of the majority report. The subject was finally laid upon the table, the Academy expressing no *official* opinion on either of the reports.

MADDOCK ON DISEASES OF THE THROAT AND LUNGS.

In the *REPORTER*, for June, we noticed this work, and take this opportunity to announce that the American edition is ready for delivery. So much effort is being made by ignorant quacks in Philadelphia and New York, to create an excitement on the subject of inhalation, by advertisements in the daily papers, that the practitioner is often annoyed with questions on the subject. Maddock's work will show that inhalation is no *new* mode of treating these forms of disease, and will give the practitioner ideas worthy of thought.

The presuming arrogance of such men as Hunter and Pancoast, we are sorry to see, has misled some respectable practitioners of medicine. Those desiring information on the subject of medical inhalations, cannot do better than inclose one dollar to C. W. Vanhorn & Co., No. 32 N. Ninth Street, and they will receive Maddock's work by mail, in a neat and beautiful binding, or unbound, for fifty cents.


Mr. Vanhorn is also manufacturing Snow's Inhaler.

ALL ABOUT PORTRAITS.

Our friends of the *Nashville Journal of Medicine* (one of our best exchanges, by the way), ever watchful over the interests of the school they labor so hard and so effectually to build up, are wonderfully exercised on the subject of portraits. As we claim a sort of paternity over this species of enterprise, we feel free to correct a misapprehension under which the *Journal* seems to labor. It appears that they have received a circular, announcing that the portraits of the Professors in the Jefferson Medical College of Philadelphia will shortly be published, on a single plate. This their keen, watchful eye, construes into an *advertisement* for the Jefferson Medical College. Now, it was intended to be *no*

such thing. The Jefferson professors have nothing to do with the enterprise, as it is a private one, having originated entirely with Mr. Joseph M. Wilson, of Philadelphia, a young and enterprising publisher of that city. If the editors of the *Journal* wish to encourage enterprise, we hope they will aid our friend in trying to get subscribers to his beautiful picture, which will adorn the office of an alumnus of the Nashville, as well as of the Jefferson school.

We can bear testimony to the modesty of the Jefferson professors, as we once made the attempt to publish the portrait of one or two of them in the *REPORTER*, but failed in obtaining their consent.

 In this number we conclude two valuable series of articles, viz: The History of the American Medical Association, which has been in course of publication for more than eighteen months, and Dr. Phillips' excellent Physiological Essay. This essay has been very acceptable to our readers, and we are sorry that we have been compelled to give it in detached portions. The conclusion of these papers will give correspondents more room, and we hope they will avail themselves of the opportunity.

NECROLOGICAL RECORD.

DIED.—At Wynberg, South Africa, on the 13th of January last, of apoplexy, REV. JOHN SCUDDER, M. D., *æt.* 29. Dr. Scudder had, for thirty-five years, been engaged in missionary labor in India, in the service of the American Board of Commissioners for Foreign Missions.

— At Mosul, Turkey, on the 25th of March last, REV. HENRY LOBDELL, M. D., *æt.* 28. Dr. L. was born in Danbury, Conn., January 25th, 1827. He graduated in medicine at New Haven, in 1850, and connected himself with the Mission of the American Board to Assyria in 1851.

— In New York, July 31st, JAMES C. BLISS, M. D., in the 65th year of his age.

— At Saratoga Springs, N. Y., August 20th, MORETON STILLE, M. D., of Philadelphia, in the 33d year of his age.

— At Laona, Winnebago Co., Illinois, July 14th, DR. STEPHEN W. WILLIAMS, in the 62d year of his age. Dr. Williams lived and died highly respected as a physician, and as a Christian. He was the author of several works, and was a large contributor to the medical periodical literature of the day. For several years he was a contributor to the pages of this journal. He was an ardent lover of his profession, and constantly exerted himself to advance its interests, particularly through the medium of its organizations. We would be glad if some one would furnish us with a biographical sketch of Dr. W.

— At Smithfield, R. I., ELISHA BARTLETT, M. D., late Professor of Materia Medica in the College of Physicians and Surgeons, New York, in the 51st year of his age.

— In Richmond, Va., July 15th, R. L. BOHANNAN, M. D., Professor of Obstetrics in the Medical College of Virginia, *æt.* 68.

ECLECTIC AND SUMMARY DEPARTMENT.

Ohio State Medical Society—Patents.—At the last Annual Meeting of this Society, held at Zanesville on the 5th, 6th and 7th ultimo, the Society very promptly, and with much unanimity, repealed the resolution offered by Dr. Grant at its annual session in 1854. As the knowledge of the passage of the resolution has passed far beyond the local bounds of the Society, we subjoin the resolution rescinding the same, prefacing them only with the remark, that our readers and the profession generally will rejoice with this demonstration of the fact, that there is sufficient conservatism in its ranks to stay the truant wanderings of *Young Physic*. The following are the resolutions:—

Resolved, That the resolution offered by Dr. Grant (a member of this Society, and not at this, or at that time, a practitioner of medicine), at the last session of this Society, which says, "that it is not derogatory to medical dignity, or inconsistent with medical honor, for medical gentlemen to take out a patent right for surgical or medical instruments," was offered at a time when many members of the Society had left for their homes, and was not, therefore, the sense of this Society.

Resolved, also, That said resolution is in direct opposition to the code of Medical Ethics adopted by the Society, and, therefore, be it further

Resolved, That said resolution offered by Dr. Grant, and adopted by this Society, be, and is hereby, rescinded.—*N. Y. Journal of Medicine*.

New Cure for obstinate Bleeding following the extraction of a tooth.—Dr. Samuel A. Cartwright, in the *Boston Medical and Surgical Journal*, recommends for this purpose the application of a common amputating tourniquet "over the head obliquely, the pad placed on the outside of the cheek over the bleeding gum, and the screw over the pad; a pledget of raw cotton, and nothing else, being previously inserted without force into the bleeding cavity. As soon as the screw is brought to bear on the pad, resting on the outside of the cheek, the hemorrhage instantly stops." The bleeding is arrested "on the same principle that uterine hemorrhage is, by making the bleeding cavity contract." The yielding parietes of the alveolar process which has been expanded by the extraction of the tooth, and still more expanded by the forcible insertion of tightly fitting plugs, no sooner feel the lateral pressure of the screw than they contract, and the contraction arrests the bleeding; and it does this with as much certainty as the contraction of the uterus arrests uterine hemorrhage after delivery.

Quinine in Yellow Fever.—We make the following extract from the record of the Physico-Medical Society of this city, inasmuch as it contains facts which will be interesting to the profession; the evidence adduced in favor of the use of the sulphate of quinine, as administered

in the Charity Hospital in yellow fever, is so conclusive and so reliable, that it cannot fail to weaken the prejudice which exists against it in the minds of many excellent practitioners.

"Dr. Hunt, after adverting to late discussion on fatty degeneration of the liver, and giving his views on that subject, and the general pathology of yellow fever, said, that he had stated at a previous meeting of the society, when advocating the treatment of yellow fever by the use of quinine and opium, that he was confident that of the patients admitted into the Charity Hospital during the late epidemic, and during the expiration of the first twenty-four hours of the attack, not one in fifteen had died; he was now prepared to show, by the best authority, that not *one* in *twenty* died of those who entered within the specified time.

"On an examination of the books of the hospital, he had found that there had been 565 admittances of patients of yellow fever, who entered within the first twenty-four hours; only 27 of whom had died. Of these, fully fifteen-sixteenths had been first seen by the house surgeon, Dr. Choppin, or his assistant, Dr. Canter, whose almost invariable custom was to administer the *haustus quiniae* of the house." This, as it is well known, consists essentially of twenty grains of quinine and forty drops of laudanum.—*New Orleans Medical News and Hospital Gazette.*

Neuralgia.—Dr. Ebdon, in the *Indian Annals of Medical Science*, makes very favorable mention of the use of the hydrochlorate of ammonia in neuralgia. He notices cases in which its action has been very beneficial, such as *tic douloureux*, toothache, *clavus hystericus*, and even in one case of neuralgic dysmenorrhœa. He prescribes the salt in doses of twenty to thirty grains, in mint water or camphor mixture, to be taken every twenty minutes for three doses.—*Ibid.*

Hints from a Cupper and Leecher. By J. H. Ross.—Having spent many years in cupping and leeching, perhaps I shall be excused for giving the profession, through your journal, a few hints in relation to some points which should be observed in the practice of this branch of therapeutics.

And first, let me say, that in the use of leeches, certain errors are by no means unfrequent, namely, that in leeching adults, the error in many cases consists in too *little* depletion; whereas, in young children, it consists in too *much*. It should be remembered, that one leech for a child a year old is, in ordinary circumstances, fully equal to twenty-five for an adult. A leech bites a child as though it were a perfect luxury. All the tissues are tender. But this is not all. It is not only easy for a leech to find bloodvessels in a child, but the circulation being more rapid than in adults, the flow is consequently augmented. Neither is this all. As a general rule, we can safely bleed a strong man until he faints; but never an infant. Moreover, two small leeches are always safer for a child than one *large* one, it being easier to control the bleeding from six bites of the former than from one of the latter. As a general rule, leeches should not be applied to the *throat* of a child, especially over the trachea. It is safer to select the superior portion of the sternum, which will usually fulfil the indications. Wherever applied,

a young child should never be covered up, and left for nature to arrest the hemorrhage. I trust your readers will pardon me for calling their attention, as some of them will recollect, for the second time, to the importance of a cataplasm before leeching. It is common to foment the part after the leeches come off. but if it cannot be done but once, it had better be done in advance, and I will give a few reasons for such a conclusion. In the first place, it makes the part very acceptable to the leech, as it almost never refuses to fasten at once upon the skin thus prepared, and the time thus saved may be of great importance to the patient. It also saves much fatigue and anxiety, and enables the leecher to serve much sooner some other sufferer who counts the moments of delay as hours. But this is not all. It answers the end for which the poultice is intended (namely, depletion), more perfectly when applied before leeching than subsequently. It is not an easy matter to soften and relax the dermoid tissue so as to promote the flow of blood to the best advantage in a moment. It takes time. If the poultice be delayed until after the leeches fill, it cannot be applied until the last one comes off; and it often happens that before this occurs, some of the bites have nearly closed, so that the benefit of the cataplasm, to a great extent, is lost. When, however, the poultice precedes the leeching, the moment that one lets go the bite bleeds at once, whether anything is applied or not. To be efficient, the poultice should be large and hot; and if a little mustard be added, so much the better. In a large majority of cases, leeches are preferable to cups for the abdomen, perineum, neck, face, and extremities. For the thoracic, dorsal, and temporal regions, and especially for pulmonary, renal, spinal, and ophthalmic affections, cupping is often far more efficient than leeching. Moreover, the quantity of blood taken in leeching is always uncertain, there being in one case much more, and in another case much less depletion than is intended. It is impossible to tell before the leech is applied how much blood will flow, there being so many modifying circumstances; some of which, perhaps, I may mention, though most physicians may be familiar with them.

Much depends upon the size of the leech; and hence many physicians, to take advantage of this fact, order large ones. But this is decidedly wrong; for in purchasing leeches, we have to take them as they run, both large and small; and therefore, if we select the large ones for those who first call, we cannot supply those who call subsequently with even an average size, and it is not treating them fairly; and though we give them the largest that we have, the doctor is deceived, and perhaps the patient suffers. Not only so, but sometimes we are compelled to purchase a lot (because we can do no better) which has not a *large* leech among them. The proper course seems to be to have the medium size the criterion, and to modify the number as a deviation from this standard may demand.

Again, the *condition*, and also the *position* of the part, modifies the bleeding. If the part be inflamed or vascular, the discharge may be profuse. If it be hard, swollen, cedematous, cold, or exsanguineous, little blood may be obtained. The force and the frequency of the *pulse* should be taken into consideration. The position of the part will also, as I said, modify the bleeding. For example, a leech-bite upon the

hand, which bleeds profusely while it hangs down, will stop at once on raising the hand above the head. There are other modifying circumstances which I need not stop to name. The average quantity of blood that a leech draws is about two drachms, which, with the subsequent bleeding, amounts to about three-quarters of an ounce. To arrest the bleeding, I have always found a simple compress sufficient, though various styptics are used.

Although I intended to say something further on the subject of cupping, yet, as I have already occupied more space in your valuable journal than I have any right to claim, I must omit it, at least for the present. In regard to sustaining those who make a specialty of this branch of therapeutics, perhaps I may be permitted to say a word. It is generally admitted that there should be, in all large cities, competent persons to attend to these applications, and in cases which require very nice and careful management, physicians are generally very glad to avail themselves of the services of some skilful hand. But it should be remembered that these cases will by no means sustain him. His principal support must be derived from the common every-day cases; and if physicians adopt the practice, as is often the case, of sending to the nearest apothecary for the leeches, or a leecher, saying anybody can put them on, he cannot be sustained. The truth is, apothecaries, by each one doing a little, do just enough to spoil the business, with little or no profit to themselves. Moreover, if the patient, or any inexperienced person applies them, he seldom does it to the best advantage; frequently cannot make them bite, almost always produces much fatigue, generally loses time, and gains nothing in the end.—*N. Y. Medical Times.*